

VIRGINIA WILDLIFE

NOVEMBER 2010

FOUR DOLLARS



Students & Snails • Fresh Beginnings for Wildlife • Redbud Run



Bob Duncan Executive Director



Thanksgiving has always been my favorite holiday. That, and Groundhog's Day—but that's another story. Thanksgiving honors a most special family time, and my memories center upon the elaborate meals, which always seemed to include wild game, and the outings shared with family and friends to partake of nature's bounty. My earliest hunting memories carry me back to an abandoned apple orchard in Pulaski County where a holiday rabbit hunt with my grandfather, dad, uncle, and cousin was like a scene out of a Norman Rockwell painting of men and dogs that surely speaks to a less complicated time in life. And what a place for rabbits!

I also recall the time my Chesapeake Bay retriever and I left my home in Radford after a wonderful dinner, headed back to college in Tennessee, only to get caught in a major snowstorm. It was one of the few times I remember that resulted in Interstate 81 being closed and

when we ended up stranded in a deep snow drift, it was a Chilhowie deer hunter on his way home from a Thanksgiving Day hunt who came to our rescue. I never got his name, and he would not accept any payment. He just asked that I call his wife to tell her he was

safely on his way. His act of kindness to his fellow man and a big ol' Chessie have often been recalled.

Whether it was deer hunting in the snow or my very primitive attempts at duck hunting on the New River, I have always treasured late November and the moments of quiet contemplation that accompany this holiday. I am most grateful for those memories and for the times spent with family in the southwest corner of the state. While I have been blessed to hunt in many places away from Virginia, in my heart I am never far from the experiences gained as a young hunter in the land that I call home.

Here's wishing you and your loved ones the season's best!

Mission Statement

To manage Virginia's wildlife and inland fish to maintain optimum populations of all species to serve the needs of the Commonwealth; To provide opportunity for all to enjoy wildlife, inland fish, boating and related outdoor recreation and to work diligently to safeguard the rights of the people to hunt, fish and harvest game as provided for in the Constitution of Virginia; To promote safety for persons and property in connection with boating, hunting and fishing; To provide educational outreach programs and materials that foster an awareness of and appreciation for Virginia's fish and wildlife resources, their habitats, and hunting, fishing, and boating opportunities.

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The smell of a wood burning stove, the backdrop of colors, the buck on the move—all signs of the late fall season, a time most revered by deer hunters in Virginia woods.

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VIRGINIA WILDLIFE



Courtesy of Mark Banker

Cutting trees is good for many animals.

by David Hart

When Dean Stauffer holds up a photo of a fresh clearcut before his third-year wildlife students, he asks them to give their reactions. Predictably, at least a few of them are shocked or saddened by the sight. Once Stauffer has their attention, the wildlife professor at Virginia Tech leads his students in a lively discussion about wildlife habitat and habitat diversity.

"I really upset some of my students when I tell them that clearcutting is actually good for many species," says Stauffer, "especially those students who come from an

urban environment and aren't that familiar with various types of wildlife and their preferred habitats."

There's no question timber harvesting, especially on public lands, is a contentious and highly emotional issue. It has been vilified by many in the environmental movement for the past 30 years. As a result, the general public has an overwhelmingly negative perception of clearcutting, and any attempt to cut a tree on public land is met with swift and fierce opposition from activists. Timber harvesting on Virginia's 1.8 million acres of national forest is just a fraction of what it used to be.

"We are missing a whole component of high-quality habitat," says Stauffer.

That's why a variety of conservation organizations like the Ruffed Grouse Society, Quality Deer Management Association, and the National Wild Turkey Federation are calling for more cutting on our public lands. So are many of the Department's own wildlife biologists. Currently, less than two percent of the 1.8 million-acre national forest land in Virginia has been cut in the last 20 years, according to Ruffed Grouse Society Regional Wildlife Biologist Mark Banker.

"Last year, less than 1,200 acres were cut and the trend has been similar for many years before that," he says.

Stauffer and Banker both agree that maintaining just 5 percent of the



©Bill Lea

Signs of life are readily apparent shortly after a selective cut (left). Above, vibrant growth quickly transforms the gray scar on the landscape with a mix of young trees, vines, and thickets.

national forest as 0 to 10-year-old forest would create an incredible diversity of habitat that would benefit a wide variety of wild animals.

"That would mean the forest would be on a 200-year rotation," explains Stauffer. "In other words, once an area is timbered, it wouldn't be timbered again for at least another 200 years. It also means that half of our national forest would be over 100 years old."

In The Name Of Diversity

Stauffer says forestry practices have changed dramatically in the past few decades, thanks in part to those environmental watchdog groups. Now, responsible logging companies follow what are known in the industry

as Best Management Practices (BMPs), which reduce the overall impact of a cut. BMPs reduce erosion and provide buffer zones adjacent to watersheds, among other things. The short-term impact is minimal.

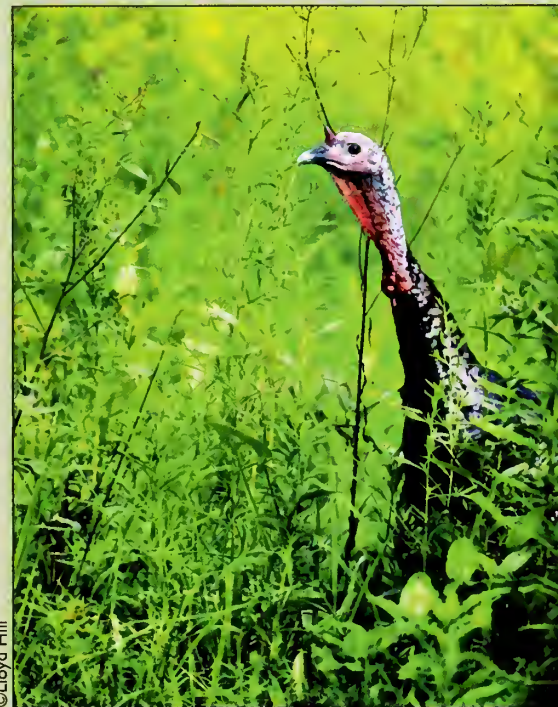
There's no question a fresh clearcut is an unattractive gaping hole in the middle of a lush, green forest. What logging opponents don't show, however, is that same clearcut 20, 10, even 2 years later. Within just a year, even less, young growth springs from the tree stumps and grasses rise from the disturbed soil. Soon after, a wide variety of vines, shrubs, and other plants thrive in the new sunlight that reaches the ground. The cycle of life starts over, from the plants and insects to the

birds and mammals that feed on them.

A few years later, the former gray smudge on an otherwise verdant hillside is itself a vibrant green, a mix of young trees, vines, and dense thickets. A study conducted by a U.S. Forest Service research ecologist found the production of fruits and berries from such plants as dogwood, poke-weed, blackberry, and greenbrier was up to 20 times higher in regenerated forests than in undisturbed, mature forests. As a result, a rich mix of birds and mammals thrive in that lush new growth. In short, it's incredible habitat teeming with life.

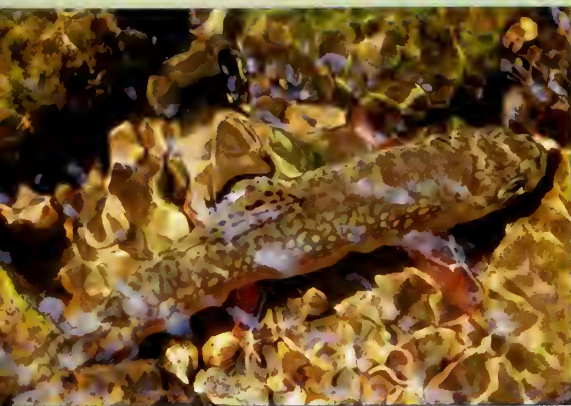
In ten years, the new trees provide overhead cover for such species as grouse and woodcock, while the dense cover under those trees still offers excellent food and cover for a variety of other critters. Turkeys and songbirds nest and feed in it. Deer thrive in it; so do small mammals and reptiles.

No one is proposing the wholesale mowing of our forests, and no one is suggesting we harvest areas that have been set aside as wilderness or even the few areas that qualify as



©Lloyd Hill

Turkeys are among many species that benefit from the dense cover and food sources created by good timber management.



©David Hart

What About Water?

There's no question that logging can have negative impacts on watersheds when timber companies don't follow best management practices. However, when done thoughtfully and carefully, the impacts can be lessened. One study conducted in the Chatahoochee National Forest in Georgia found virtually no long-term impact from logging to a nearby stream. Other studies that monitor water quality in relation to timber management activities have also shown negligible effects.

George Washington and Jefferson National Forest Planning and Forest Ecology Staff Officer Ken Landgraf says loggers are required to follow strict guidelines set by the forest service before they cut a single tree. Those guidelines include buffer strips of at least 100 feet adjacent to permanent streams.

"We survey an area and mark all boundaries and even the trees that can and can't be cut," he says. "All logging activity is heavily monitored and controlled to ensure minimum impact to nearby watersheds."

old-growth. Large areas of the George Washington and Jefferson National Forest aren't suitable for logging—the slope is too steep or rocky and the soil, too thin to rebound quickly. There are thousands upon thousands of acres, however, that are perfectly suitable for timber harvest.



©David Hart

However, drive down just about any gravel road that snakes through Virginia's mountains and you'll see nothing but homogenous, 70- to 100-year-old forests that offer little in the name of diversity. A number of species rely on those mature forests, of course. Scarlet tanagers and orioles live almost exclusively in the tops of mature trees. Woodpeckers rely on large, dead trees, as well. Countless other birds and mammals, however, need young forests. Even if they don't "need" it to survive, those species benefit tremendously from the habitat created by timber management. Ruffed grouse are a perfect example.

"Grouse utilize early-successional habitat because it not only provides more food in the form of soft mast, green vegetation and hard mast, but because it provides necessary overhead cover from predators like hawks and owls," says Banker. "Food is limited and there is virtually no protection from predators in a mature forest."

That's why grouse have fallen on hard times. And with them, so have grouse hunters.

Hunters Matter

More than 34,000 hunters pursued grouse in 1994, according to a survey conducted by the Department. They spent 176,000 man-days in the grouse woods and harvested 68,418 birds. Since then, those numbers have plummeted. Just 13,300 grouse hunters took to the field in 2008, spending an average of only five days in the woods out of the lengthy season. The reason? Timber activity was considerably higher in the 1970s and '80s, but those clearcuts have matured and no longer provide suitable habitat for the popular game bird.

Things are just as bleak for deer hunters who frequent the slopes and hollows in the western mountains. While private land deer harvest figures west of the Blue Ridge have generally kept pace with those east of the Blue Ridge, harvest figures have plummeted on public lands west of that range. Bath County hunters, for

example, tagged about 2,800 deer on public land in 1986. Twenty years later, that number fell to around 1,200. The trend is similar in virtually every county with national forest land. Just as grouse need young forests, deer also benefit from the dense growth that springs up in managed forests. Older oaks may produce acorns, but they shade out much of the growth deer need when acorns aren't available. In short, there is nothing for them to eat in a large stand of old trees.

"There's no question removing mature trees to allow sunlight to reach the forest floor would be greatly beneficial to deer," says DGIF Deer Project Coordinator Nelson Lafon. "I don't think we will ever get back to the population levels of the 1980s, but increas-



©David Hart

Grouse numbers have fallen; they need high-quality habitat that comes with active timber management.

ing management activity on the national forest would certainly help."

A bigger threat to our forests is looming, adds Lafon. As oaks mature and die, shade-tolerant trees like maples and white pines take over. That not only spells trouble for deer, it can also have a detrimental effect on turkeys and bears, which rely on acorns in the fall.



Bobwhite quail rely upon the early successional habitat created by clearcuts.

©Lloyd Hill



Two years after a selective cut the forest floor has been transformed, creating cover and food for a range of wildlife, including the blue-winged warbler (right).

©Rob & Ann Simpson

©Bill Lea

Also, the open forest floor may be leading to lower survival rates of fawns. A study in Pennsylvania found that predation of whitetail fawns is significantly higher in big woods than it is in farm country, where fawns have far more hiding places.

The ripple effect is obvious. Based on mandatory national forest permit sales, hunters are abandoning the na-

tional forest. There were nearly 30,000 fewer permits sold in 2007 than in 1994. Lafon doesn't know if the deer kill has dropped due to a decline in hunters or because the more open forest has made whitetails more vulnerable to harvest, therefore reducing their numbers overall. Possibly, hunter numbers have fallen as a result of the decline in deer and other game. Either

way, the slide in hunter numbers hurts conservation efforts for all wildlife supporters. It also has a detrimental effect on rural economies that depend on hunter dollars in the fall and winter seasons.

Opponents suggest logging should instead take place on private property. Banker agrees, but he says that's not happening much these days, either. Besides, hunters should have quality habitat on public lands, as well.

"Hunters are one of the largest user groups of Virginia's national forest. Why shouldn't forest management include their needs?" he asks.

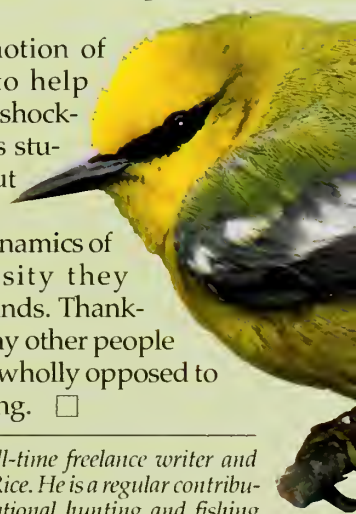
Not Just About Game

Managing our public forests doesn't just benefit deer, turkeys and grouse, and the hunters who pursue them. Cutting trees creates ideal habitat for a variety of non-game wildlife, as well, says Stauffer. A study conducted in South Carolina found considerably higher densities and a broader variety of songbirds in regenerated clearcuts than in mature forests. In some cases, lack of early successional habitat is in part responsible for the drastic decline in a number of songbirds which rely on it for nesting and brood rearing.

"Golden-winged and blue-winged warblers and prairie warblers are in serious decline largely due to habitat loss," says Stauffer. "One way to help them is to provide more early-successional habitat through timber management."

The very notion of cutting trees to help wildlife may be shocking to Stauffer's students at first, but once they understand the dynamics of habitat diversity they change their minds. Thankfully, so are many other people who were once wholly opposed to timber harvesting. □

David Hart is a full-time freelance writer and photographer from Rice. He is a regular contributor to numerous national hunting and fishing magazines.





Students Saving Snails

An endangered snail is getting another chance to thrive in the rivers of southwestern Virginia.

story and photos by Gail Brown

The sign says "Buller Fish Cultural Station—Visitors Welcome—8AM to 4 PM." There's no mention of the spiny riversnail, no etching of the wavy-rayed lamp-mussel or notification of the various gastropods or bivalves creating such a stir at the station. It's only when you come closer and see the smaller sign, "Aquatic Wildlife Conservation Center (AWCC) Wildlife Diversity Division," that you gain a sense of what's going on—a whiff of the excitement in the air.

What's going on at the Buller Station in Marion is an intensive and successful effort to propagate and release Virginia's state and federal endangered mussels and snails. The goal: restoring populations to previous numbers wherever possible. To that end, Project Manager Mike Pinder has supervised efforts at the center since 1998, when the building was turned over to the Wildlife Diversity Division. Slowly but surely,

through the work of Pinder, Mussel Recovery Specialist Amanda Duncan, Mussel Propagation Specialist Joseph Ferraro, Mussel Recovery Biologist Nathan Eckert, and Mussel Technician Jonathan Orr, these endangered animals are relinquishing deeply imbedded secrets. The result? From 2004 to the present, 4.1 million mussels were produced and 661,000

were released. In addition, almost 11,000 spiny riversnails were produced and then released into the Clinch and Powell rivers. As more information comes to the surface, chances for continued success increase.

Yet, for all their hard work, Pinder, a cheerful taskmaster, remains concerned that few people realize "the treasure trove that is southwestern Virginia." According to Pinder, "The younger generation feels like



Above and top right, students at Pearson's Corner (Hanover Co.) measure growth and record observations.

Cleveland Elementary students release snails with biologist Mike Pinder. Photo by Suzie Gilley

there is nothing special where they live. In truth, people travel from all over the world to see some of these unique animals. There's a rich, natural heritage of global importance here. In many ways, it rivals the rainforest." Snails feed on algae and organic debris and are an important source of food for many species. As with many endangered aquatic species, pollution, siltation, and the construction of dams have cost these animals—and animals that survive because of them—dearly. While the

diversity of freshwater snails in North America is one of the highest in the world, the rate of imperilment is also the highest, with 74 percent of the species listed as conservation targets.

Not one to ignore a nagging concern, Pinder kept coming back to the idea that young people need to be involved in the care and restoration of their environmental inheritance. "Only then," Pinder states, "will they grow to understand they are stewards of one of Virginia's most

unique natural resources." Pinder first looked to mussels as the solution to this challenge; creatures so beautiful, so rare, so sneaky at times: "You think they're so benign, just sitting there. They're not. They're plotting! They fool the fish into raising and transporting their young. They make the fish work for them," says Pinder. Feistiness aside, raising mussels is just too complex an endeavor to farm out to schools, so three years ago Pinder turned his focus toward *lo fluvialis*, the spiny riversnail.



Biologists Amanda Duncan and Joe Ferraro monitor conditions at AWCC. Snails are an important indicator of water quality and a food source for other animals.

In Virginia, these gastropods (mollusks with one or no shells) are found in the Powell, Clinch, and North Fork Holston rivers. The name spiny riversnail comes from the ridges that are sometimes found on their shells. These snails make their own shells, which increase in size as the snails grow. While not as flashy as their two-shelled cousins, the shells are beautifully colored in browns and greens. More importantly, this snail has attributes that make it the perfect animal for students to raise, study, and rescue. At two and one-half inches in length, it is the longest river snail in North America and, with a life span of 15 years, it is one of the longest-lived snails on the continent.

But what Pinder believes captures the imagination of those who decide to help is the fact that they are state endangered and, like humans, the only member in their genus. Should they disappear, there really won't be any more. By 2008 the decision was made: *Students Saving Snails*

hatched into the open arms of fourth and fifth graders in Tazewell, Russell, and Wise counties. Last year schools in Washington and Scott counties participated, and this year schools in Smyth and Buchanan counties will join the effort.

"Fourth and fifth graders are the perfect age for this project," states Wildlife Education Project WILD Coordinator Suzie Gilley. Gilley was the first person Pinder contacted about the project, as her established relationship with teachers across the state and her knowledge of what will or will not work in a classroom is invaluable. "The kids are responsible and the snails, easy to care for. Snails are benign, no one's allergic to them, and the cost of setting up the 10-gallon tank needed to raise the snails is minimal."

Gilley encourages schools in other parts of the state to raise garden snails and learn about decomposers. "While they're not the same," states Gilley, "the same opportunity is there

[for students] to develop observational skills and character traits such as responsibility." Gilley also loans her spiny riversnails out to schools wanting to observe aquatic snails.

Gilley set up a tank in her office before approaching teachers to determine if any problems might surface. One did. "We tried growing algae, or food, without any small fish but it just wasn't working." Fish add nutrients that help the algae grow. They also help the algae by eating the zooplankton that feed on it. "Once I introduced a few guppies we had all the algae needed to keep the snails happy," states Gilley.

Participating classrooms are given four snails, the aquarium, and all materials needed to get started. While raising snails is far easier than raising mussels, there are still critical steps that need to be followed. The tank should not be cleaned with detergents. Clean rocks can be added, but not too many, as fecal matter will accumulate. Spiny riversnails lay their eggs in the spring on smooth surfaces, so a piece of PVC pipe is recommended. Because the snails feed on algae, the aquarium should be placed in a sunny window to give the algae an opportunity to grow. Extreme temperatures should be avoided, and a temperature of about 65 degrees is best. Students also need enough room to move around the tank and take notes as to what they observe.

Cleveland Elementary teacher Ruth Elam, who's been involved in



Snails with blue tags are released in the Powell River; yellow, in the Clinch River.



Teachers attending the Virginia Science Standards Institute spend time at AWCC with Mike Pinder learning about the unique resources of the area.



Ruth Elam (2nd from L) and Suzie Gilley (far R) discuss the Students Saving Snails project with Council Elementary/Middle School (Buchanan Co.) teachers.

the program all three years, states that her classroom is used for after-school activities. Elam notes that her students linger long enough to warn the oncoming group not to "bother the snails or put anything into the tank." "I may sign for the snails," states Elam, "but they feel responsible. We do a lot of math and a lot of

science, but they learned responsibility and a lot more, too."

Last year's fourth graders not only raised the snails, but helped AWCC release almost 100 spiny riversnails into the Clinch River at Nash's Ford landing. Before the release, the kids demonstrated the skills they acquired during the year

by measuring the snails and recording the identification number attached to each snail's shell. The identification number is a unique combination of one letter and three numbers on a bright yellow tag. When all tasks were completed, the students released the snails into the Clinch together.

At the start of school this year, Tyler, now in fifth grade, stopped by her room to announce he saw one of the snails they released in the spring. Elam says she fishes in the river often, albeit not right there, but has never seen a mussel or a snail, although she believes she might find one if she looked—carefully. No doubt Tyler saw it because of the bright yellow tag. But how he noticed it—what with the grasses, stones, and silt—is hard to say. It must have been pure luck. Or a fluke. Or maybe a sign of what's to come. □

Gail Brown is a retired teacher and school administrator.



Deer

is Not Just for Men

by F. Eugene Hester

When I talked with Chelsea Perry of Stafford, I was surprised to learn that this attractive young lady was as enthusiastic about deer hunting as any man I know. And she has the trophies that testify to her skill and determination. Chelsea's descriptions of her adventures were so vivid that I decided to let her tell her own story.

©F. Eugene Hester

Hunting

I Started Young

According to my father, I went on my first deer hunt when I was three years old. I was too young to remember, but my father tells the rest of the story like this...

When I woke up one morning, he asked me if I wanted to go hunting with him and I did. We got ready and went down to a creek bank on our property. After an hour or so, eight does crossed and came over to our side of the creek. My dad decided to take a doe! Because he is in a wheelchair, he hunts on a four-wheeler, and because he couldn't get off, he showed me how to tie a rope around the deer to pull it out of the woods behind the machine. We brought the deer home and he let me help skin it. I'm shocked I did that at such a young age!

The first deer hunt I remember going on was when I was six years old. My father and my brother, Chad, picked me up from school early so we could go sit in the woods. I felt like I didn't learn a thing in school that day. I just watched the clock, waiting for "11" to roll by.

We would climb into the box stand and wait. While my dad and brother were on the lookout, I sat on the floor of the box stand and did some homework. After a while, they saw some does come out of the

woods and told me to slowly stand up. That was pretty cool! I wanted my dad or my brother to shoot one, but unfortunately it was not a doe day and that was all we saw in the woods that afternoon.

My First Real Hunt Was When I Was Only Ten Years Old

The first time I ever carried a gun was when I was ten. I had my dad's black-powder gun when he and I went down to the creek bank. He sat on the four-wheeler and I brought a foldout chair to sit on. After an hour or so, a small 4-point buck came down to get some water from the creek.

Because my father has so many "big bucks" on the wall, I thought this was an extremely little buck. I told my father that the deer was just a



©John R. Ford



Chelsea Perry learns how to determine distance and range for her shotgun with help from her dad, Keith Perry.

“teenager” and I wasn’t going to shoot it. I don’t know what I was thinking! My dad whispered that he was going to take the gun from me and shoot the deer himself. I told him that neither of us was going to shoot it, and I refused to give him the gun.

I Like to Start Early

I would rather leave before daylight; I think it’s more exciting that way. But because we were making drives there was really no need to be there before dawn. It’s not like we had to get in and get settled like we did when still-hunting. I like to hunt from sunup to sundown! I never want to leave early. After two or three drives, I’ll go back to the hunt-

ing shack, or the truck if it’s real cold, and have a sandwich and a couple of snacks for lunch. Some of the people in the hunt club like to talk and lolly-gag during the lunch break, but I don’t like to waste time while hunting. I want to get the most drives in as possible.

My First Deer

I wasn’t able to harvest the first deer I spotted after I started carrying a gun, because the only thing I saw all day was a doe and it wasn’t a doe day. But fortunately, a couple of days later when I shot my first deer, it *was* a doe day! I was using a Benelli Super Eagle 12-gauge shotgun with 00 buck. The four drivers had just let the dogs loose and they were barking

like crazy. Not two seconds later I heard the noise every hunter loves to hear, so I hit the safety and pulled up my shotgun.

Three does came crashing down to my left, the dogs hot on their trail. Luckily for me, the does ran into a huge brush pile and turned my way, on dead run straight in front of me. My heart dropped, I was so excited. I aimed, shot, and dropped one of the does right in her tracks.

So far, I have only taken three deer. The first one was a doe; the second, a unicorn spike—which I made into a key-chain; and the third was my big 11-pointer! The doe was quite close when I shot her. She dropped as soon as my gun went off. I harvested the unicorn spike on the same day but on a different drive. I heard him

come running up the hill. He had two other bucks with him, but because of two big beech trees in my path I could only see the spike. I was thrilled. I wanted to take two in one day because my dad always seems to kill more than one every time he goes hunting. I wanted to give him a little competition. When I shot, he looked like he was going to run off, but he took one step back and I could hear him falling down the hill.

The day I took my 11-pointer was a wonderful day. I actually felt terribly sick to my stomach when I woke up and my dad begged me to stay home, but there was just no way I was going to do that! And it's a good thing I didn't. It was the last drive of the day and my dad and I just got settled into our spot. I loaded up the shotgun and sat in a tiny foldout chair. My dad had the radio earpiece in, so I kept asking if the drivers had let the dogs loose yet. He told me he would let me know when they did. A couple seconds later I could hear leaves and sticks crunching in a distance. My dad saw it before I did and said, "Oh my gosh Chelsea, stand up!"

I hit the safety off, stood up, and aimed. He was looking right at me from 75 yards away. My heart was beating so fast I wanted to make sure I was aiming right at him. As soon as I shot, because my feet were side-by-side when I stood, my shoulder flew back and knocked me right off my feet. I was lying flat on my back with my gun pointing in the air and I asked my dad if I got him.

He was laughing so hard, saying, "There's just no way," over and over again with the biggest smile on his face. He told me that he was down, that I had dropped him as soon as it hit. My dad told me it was at least an 8-pointer so I wanted to run out and see it. As soon as I got back on my feet he told me that the dogs were just let loose, and I couldn't go out there until the drive was over. He made me sit there for an hour or so and wait, more

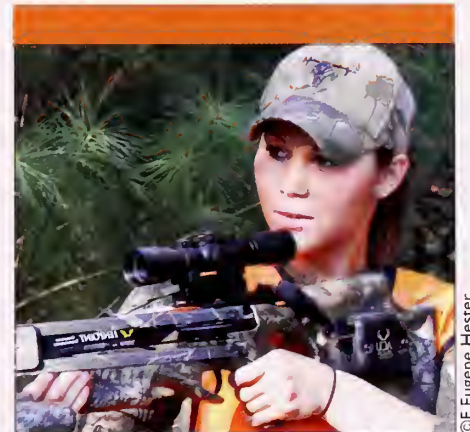
anxious than I have ever been in my life! I have only shot my gun three times, and I've taken three deer. I haven't missed yet.

My dad made jerky, stew and, of course, tenderloin out of my three deer. All of that was absolutely amazing!

An Outdoors Girl

The most exciting thing about my hunts is spending time with my father. Hunting is my dad's favorite thing to do and it's becoming one of mine. I love being out in the woods, even if I don't see anything all day. I've always been an outdoors girl and enjoy animals and nature, in general. I am counting the days till hunting seasons starts! I cannot wait to get back out in the woods. □

F. Eugene Hester is a biologist and member of the Virginia Outdoor Writers Association. He lives in Springfield.



© F. Eugene Hester

Chelsea hopes to take her next deer with a crossbow. Below, she and her dad proudly show her 11-point buck.



© Dillon Benner



Redbud

*Watershed
conservation and
Civil War history
unite.*

story and photos by Marie Majarov

Redbud Run, a rambling 5-mile-long stream of the Opequon watershed in the far northern reaches of our commonwealth, is unique and its attributes, little known. Boasting beauty in every season, it is one of only three streams in the Shenandoah Valley that support a naturally-reproducing rainbow trout population. Its deeply incised banks of limestone and marl bordering cold, spring-fed waters, lush surrounding

meadows, and healthy and productive woodlands are also hallowed ground.

Here, on September 19, 1864 in the bloodiest of all Civil War battles fought in the Shenandoah Valley, Lieutenant General Jubal Early's 15,200 Confederate soldiers were outnumbered by General Phillip Sheridan's 39,240 Union troops. This decisive "Third Battle of Winchester" effectively sealed the Confederacy's fate in the valley. A staggering, almost inconceivable, 8,630 combined Union and Confederate soldiers were killed, wounded, or missing by the end of the day.



Fisheries technicians Jason Hallacher and Aaron Coffman, with TU's Carl Rettenberger (kneeling), employ electrofishing to monitor fish populations. The biodegradable string measures distance surveyed.

Now, another major battle is being waged and won at Redbud Run. Impassioned partners from local, state, and federal agencies and organizations—along with many dedicated individuals—have been actively collaborating since 2001 to protect this rich wildlife corridor and historical site from threats of mounting urban development in the Winchester-Frederick County region. Jim Lawrence, who manages grant-funded projects for The Opequon Watershed, is working with Winchester Trout Unlimited (TU), Shenandoah Valley Battlefield Foundation (the Foundation), Civil War Preservation Trust (the Trust), and the Department (DGIF), and takes a central role in organizing the efforts involved. He describes the overall mission as a “multi-faceted watershed management project,” a greenway with the goal of providing “protection, access, and interpretation of natural and historical resources” along the entire Redbud corridor. “The importance of managing this watershed cannot be overstated,” said Lawrence. “From an awareness perspective, it serves as our region’s Chesapeake Bay.”

Run



Spring in the Battlefield Woods brings beautiful redbud blossoms, from which the stream takes its name.

Humble Beginnings

Redbud Run’s headwaters arise from modest springs in northern Frederick County and converge in the nearby 221-acre Fort Collier Industrial Park. This upper watershed primarily contributes storm drainage during dry periods to Redbud and represents a major line of defense for the trout fishery in the lower stream.

Keenly aware of the effects that rain and stormwater runoff from developed areas can have on stream health, Fort Collier Group owner and

manager Whitney Wagner and associated tenants of the park are actively engaged with Lawrence and The Opequon Watershed in vital improvements: planting trees, restoring floodplains, creating wetlands, and reducing runoff from impervious surfaces such as parking areas and rooftops. Some of the largest rain gardens in the state have been installed here. These efforts, funded by the state Departments of Forestry (DOF), Environmental Quality, Conservation and Recreation, and the National Fish & Wildlife Foundation's Targeted Watershed Program, are absolutely critical in minimizing lethal stormwater impacts that otherwise would devastate water quality and trout habitat downstream and beyond. They also make for a verdant, picturesque industrial area.



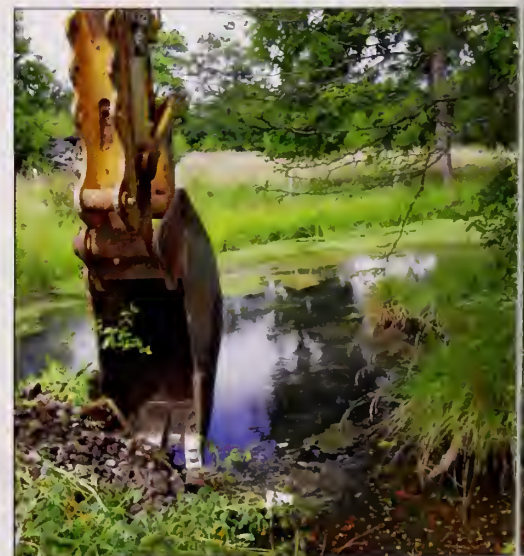
Left, a beautiful rainbow trout is being released after the survey. Above, the quaint spring house at Fay Spring adds to the area's charm.

The Core Battlefield

Flowing out of Fort Collier into the core Third Winchester battlefield, Redbud Run receives a major infusion of cold water from Fay and Sempeles springs. Over 140 acres of the Foundation's protected lands surround these springs. Here, early in the Redbud conservation campaign, partners utilized the USDA Conservation Reserve Enhancement Program to exclude livestock and restore the ecology of the riparian zone by establishing buffers and planting trees. The Department re-introduced native brook trout. More recently, the Foundation and Winchester TU obtained grants to remove a culvert

crossing that was restricting fish movement from potential spawning areas upstream.

Once large and sprawling, the battlefield has been greatly degraded, even destroyed, by rapidly expanding development. The last intact, contiguous parcels of high-integrity battlefield land bounding Redbud Run (575 acres in total) have been purchased from willing landowners by the Foundation and the Trust, with generous support from Frederick County. The result is a history-filled sanctuary of pristine oak-hickory woodlands, lavishly strewn with redbud, serviceberry, and numerous mushroom species. Meadows, fertile farmlands, cattails,



A concrete culvert is removed and the natural flow of the stream, restored.



This limestone marl crumbles easily, covering the spaces between pebbles that are needed by spawning trout.

was on this property that Union leader Col. Rutherford B. Hayes and his men charged into the stream, slogging through waist-high mud to engage enemy fire.

Chase Milner manages land conservation for the Foundation. Reflecting on the enthusiasm of the partners to protect Redbud Run and Third Winchester Battlefield, he said, "Our primary goal is to protect both the natural and cultural resources of the Huntsberry Farm. We're currently clearing invasive species and debris from the property so that we may undertake archaeological studies and further restoration work to protect and interpret the farm's historic landscape."

Trout Fishery

Leaving the quiet farmlands of the Foundation's Huntsberry Farm, Redbud Run benefits from the lush canopy of tall sycamore, box elder, and walnut trees that shade its riffling water. Here, before its confluence with Opequon Creek and eventual flow into the Potomac, another 33 acres—including 1.3 miles of Redbud Run access—were part of yet another conservation effort won by the partners and accepted for on-going management by DGIF in 2005.

Although this area might be smaller than many DGIF-held properties, it illustrates the Department's deep commitment to stream and habitat conservation, as well as its

Rain Gardens

Rain provides essential moisture for living resources and replenishes water levels in streams. Unfortunately, in urban settings significant negative effects also occur: Stormwater running off of sidewalks, roads, and roofs can carry petroleum products, animal waste, fertilizers, pesticides, and household chemicals into our streams and impact fisheries. Runoff volume and pollutants increase, water quality decreases, and water temperatures rise. Management of stormwater impact is an essential ingredient in the battle to protect Redbud Run and a major need for many streams in Virginia.

Install rain gardens! They mimic some of the valuable functions of riparian areas along streams. Rain gardens use native plants and grasses to capture the first "flush" from rain events. You will gain groundwater recharge, increase beautiful and helpful vegetation in your yard, and provide more habitat for wildlife. You can collect runoff from your roof in practical, purchased or homemade rain barrels. Be creative and have fun.

Join the battle: There are many ways you can help protect your local watershed and, in turn, save larger watersheds downstream.



Jim Lawrence of TU lays an erosion control blanket that will help protect Redbud Run during storms.

and mud flats provide habitat to plentiful bird species—blue and green herons, kingfishers, songbirds—along with beaver, muskrat, fox, and deer. All provide a glorious treasure for people to explore, to experience nature, and to gain an appreciation of the history and sacrifice occurring on this land.

The Civil War Preservation Trust's 222-acre portion of Third Winchester Battlefield features five miles of low-impact walking/hiking/cycling trails with interpretive kiosks that guide visitors through the sanguinary events of September 1864. Standing on the rustic wooden bridge over Redbud Run at the battlefield's heart, you might feel goosebumps as you look eastward over a picturesque riparian landscape toward the Foundation's newly acquired 209-acre Huntsberry Farm. It

willingness to engage in collaborative efforts. Plans are to open a “Redbud Run Conservation Area” which will, in conjunction with the greenway, provide trails, walking paths, wildlife viewing, and fishing opportunities. The property is home to a millrace and a rugged old barn that one day could be renovated for an education center. The overall greenway project is receiving funding and technical assistance from the U.S. Forest Service Urban & Community Forestry Program, administered by the DOF.

Protecting and encouraging the delicate balance that is stream health requires patience over the long term, study, and planning. To this end, DGIF Fisheries Biologist Steve Reeser regularly monitors fish populations throughout the length of the stream. Using electrofishing methodology, fish are meticulously counted, weighed, and measured, with all data recorded for analysis.

The challenge at Redbud, Reeser explains, is its unique marl geology in which “precipitate from super-saturated calcium carbonate in the water impairs trout reproduction by filling in spaces between pebbles necessary for spawning and smothering eggs in redds. This geo-chemical phenomenon is natural but can keep trout populations from reaching maximum potential.”

Stream bottom macroinvertebrates, or the “aquatic insect populations, crustaceans, mollusks, and more—food sources for trout—can also be limited by marl,” said Reeser. Macroinvertebrate numbers serve as indicators of water quality. Here, Winchester TU shines in conducting regular studies of the benthic community. More meticulous counting! Saving streams is hard work.

The property, as well as locations around Fay Spring, provides opportunities for five Frederick County schools to participate in TU’s flagship “Trout in the Classroom” program. Spearheaded and funded by Winchester TU, students raise brook trout from fertilized eggs provided by the Department. Carefully monitoring water temperature and clarity, pH,



Good eyesight and careful counting are needed for the TU macroinvertebrate study. Shown: Carl Rettenberger, Fred Boyer, and Bud Nagelvoort.

and levels of oxygen and ammonia, participants learn the importance of clean water and environmental protection. Fry are released into Redbud Run.

Conservation Victory

The campaign for watershed conservation and historical preservation of Redbud Run is multi-faceted and stirring. Much has been accomplished, even skirmishes worked through. Tasks remain, but victory is in sight. The completed greenway will truly honor the men who perished here, but the highest honor to those fallen men is the ongoing dedication, commitment, and countless hours of hard work that each individual and organization contributes to make the Redbud vision a reality. □

Marie and Milan Majarov (www.majarov.com) are retired clinical psychologists, nature enthusiasts, and members of the Virginia Outdoor Writers Association who live in Winchester.

For More Information:

Civil War Preservation Trust,
Third Battle of Winchester
www.civilwar.org/battlefields/third-winchester.html

Shenandoah Valley Battlefields
Foundation
www.ShenandoahAtWar.org

Winchester Trout Unlimited and Trout
in the Classroom
www.winchestertu.org/About_TIC.htm

Redbud Run Conservation Area
www.winchestertu.org/Red_Bud_Run.htm

DGIF Habitat at Home DVD—Native
Plants
www.dgif.virginia.gov/habitat/dvd/

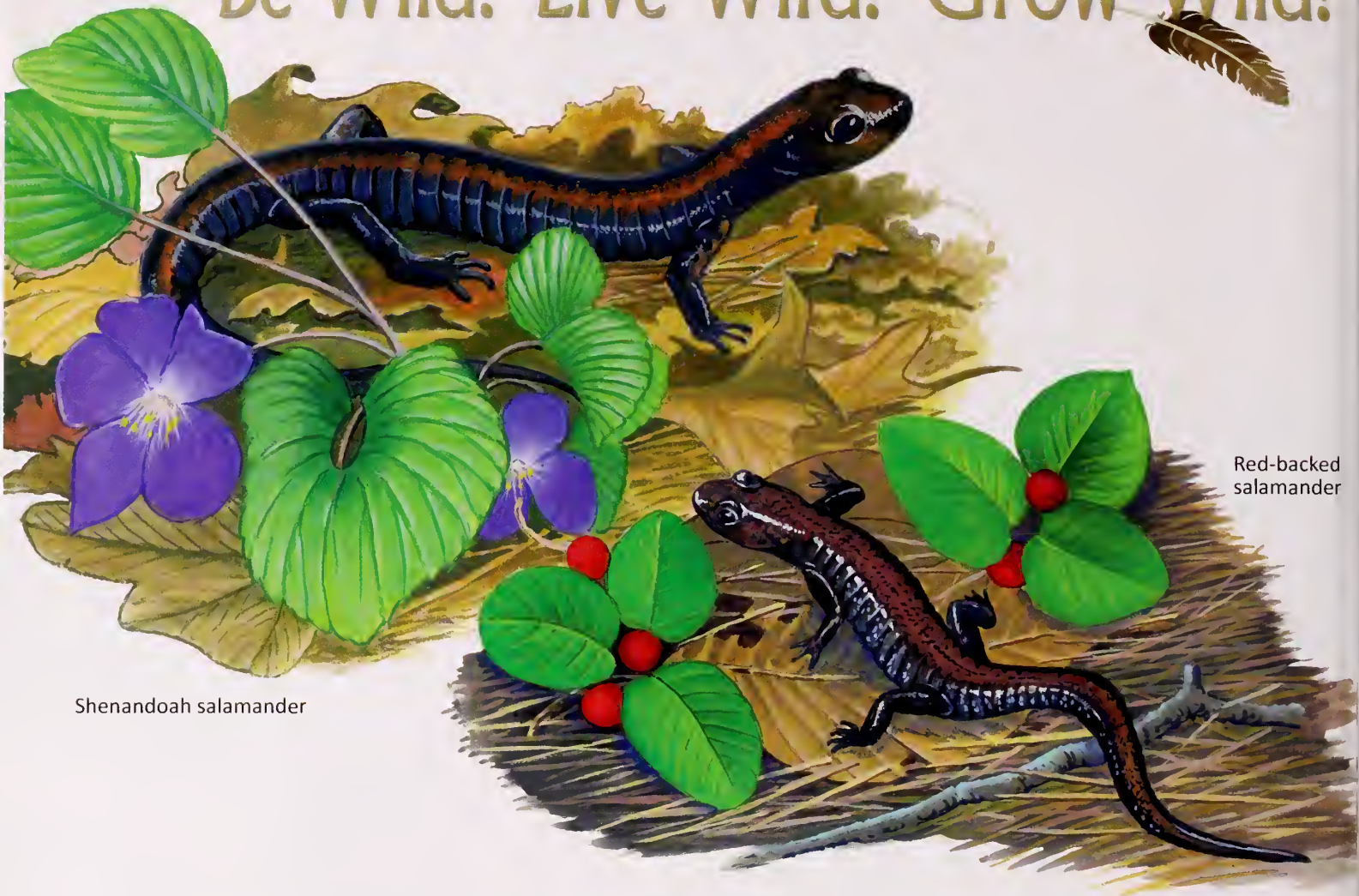
Department of Forestry—Rain Gardens
www.dof.virginia.gov/mgt/resources/pub-Rain-Garden-Tech-Guide_2008-05.pdf



Snowshoe hare

Stranded on Mountaintops

Be Wild! Live Wild! Grow Wild!



Shenandoah salamander

Red-backed
salamander

They have been lingering here since the last ice age, but Virginia's snowshoe hares might not survive the next decade.

story by Cristina Santiestevan ♦ illustrations by Spike Knuth

Once, snowshoe hares ranged throughout Virginia and other southern states. These were the days of the last glacial period, when the Laurentide Ice Sheet covered large swaths of North America, and mammoths still roamed these hills. Snowshoe hares thrived. Their thick, white coat and enormous hind feet—literal snowshoes—make them uniquely adapted for long, snow-filled winters. Then, as the ice sheet receded, they followed the cold and snow on their northward retreat.

North is not the only direction a species can move when seeking cool-

er temperatures. Up is another possibility. This is what Virginia's remaining snowshoe hares did. Rather than moving north, they moved up, following the cold and snow into the Appalachian Mountains. Today, Virginia's snowshoe hares can be found on three mountaintops in Highland County, and nowhere else. They have gone as far up as the mountains will permit. They have nowhere else to go.

If nothing were to change, these relics of a colder time might linger on our highest peaks; isolated, but surviving. Unfortunately, changes are

coming hard and fast. Human and natural causes of climate change are linked to rising temperatures, longer summers, and shorter winters. The results are not good for the snowshoe hare, which dons its winter garb in response to day length, not snowfall. As snows come later and end earlier, already molted snowshoe hares will become increasingly obvious targets for predators. A white rabbit can be awfully easy to spot in a snow-free landscape.

While the snowshoe hare's departure may be a loss for the state of Virginia, it's no concern for the

species. "The battle to conserve snowshoe hares is not going to be fought in Virginia," says Chris Burkett, Wildlife Action Plan coordinator for the Department. Snowshoe hares are relatively common throughout their more traditional range in the northern United States and Canada. Their survival in Virginia will have no real impact on their survival as a species. But, this struggle with climate change is not theirs alone. Snowshoe hares are not the only ice age holdouts in Virginia's mountaintops.

Like the snowshoe hare, the Shenandoah salamander is confined to a few of the tallest mountains in Virginia. But, unlike the hare, this diminutive amphibian is only found in Virginia. It lives here, and nowhere else. Their entire range is within the Shenandoah National Park, and their range is getting smaller. Changes in their habitat and competition from lower-elevation red-backed salamanders—both spurred by climate change—may force the Shenandoah salamander from its last remaining home. "They've got no opportunity to move," explains Burkett. "You're looking at an extinction event in the making."

The problem isn't necessarily that temperatures are getting too hot



Red crossbill



Northern flying squirrel

for Shenandoah salamanders. Instead, rising temperatures and other changes are allowing lower-elevation species to shift higher into the mountains. Red-backed salamanders, for example, consistently out-compete Shenandoah salamanders wherever the two species overlap. As climate changes allow the red-backed salamander to alter its range to higher elevations, the Shenandoah salamander may eventually find itself with no safe place left. Already, the Shenandoah salamander is listed as endangered by both the state of Virginia and the U.S. Fish and Wildlife Service.

Shenandoah salamanders are small and nondescript. They may easily escape our notice if we do not know exactly where to look.

Their disappearance, therefore, will hardly impact most hikers, hunters, and wildlife watchers. This does not mean every climate change impact in our mountains will go unnoticed. Far from it. Along with the tiny Shenandoah salamander, we could be losing some true giants.

Spruce and fir dominated forests are a rarity in Virginia. Like the snowshoe hare, these majestic trees are specially adapted for cold winters and cool summers. And, like the Shenandoah salamander, they have lower-elevation neighbors that are more aggressive and invasive. Virginia's temperate hardwood forests

are advancing into the higher elevations, forcing the spruce and fir to retreat before them. Eventually, this conifer-based ecosystem will probably disappear from even the highest places in Virginia.

The spruce and fir trees may not depart alone. The red crossbill, whose crisscrossing beak is uniquely adapted for opening pinecones, will probably leave with them. These birds rely on spruce and fir trees for their food source and will not linger if the conifers disappear. Yellow-bellied sapsuckers and Northern saw-whet owls may also decline as a result of climate change impacts, but

Act Wild

Here are three simple ways you can help Virginia's mountaintop creatures:

1. Support efforts to protect wildlife habitat locally and statewide. Undeveloped sweeps of land and water may be necessary as our climate changes and some species begin to migrate farther north or more inland.
2. Consider joining the Virginia Master Naturalist program or another statewide, or local, stewardship group.
3. Share your knowledge and enthusiasm with others. Inspire your friends and family to support wildlife conservation. Talk with your neighbor about climate change and Shenandoah salamanders. Take a child hiking.



Northern saw-whet owl

they could fare better than the red crossbill because they are less dependent on the spruce and fir forests. This may allow the sapsucker and saw-whet owl to adapt better to coming changes.

For the most part, the *losers* in this revision of habitats will be the specialists—animals and plants that are uniquely adapted for a particular habitat, food item, or other natural resource. The snowshoe hares, for example, require consistently snowy winters to match their perfect winter coats. When the snowshoe hare is gone, the less specialized cottontail will fill its void. This is a pattern that will be repeated up and down Virginia's hills and valleys. More adaptable species will take advantage of the losses sustained by more specialized species.

"Generalists that can take advantage of a lot of different opportunities are probably going to deal with climate

change reasonably well," explains Burkett. "Isolated species that can't move around are going to have a much harder time of it."

Few habitats are more isolating than mountaintops. With the exception of birds and larger mammals, most high-elevation species are essentially stranded on their lofty perches. In order to move elsewhere, the Shenandoah salamander would first need to venture down into habitats that ill suit its needs and are heavily populated by the more aggressive red-backed salamander. This is a journey that no Shenandoah salamander would be likely to survive. So, they cling to their mountains, slowly losing ground as climate changes allow lower elevation neighbors to invade their territory.

But, what can we do for the Shenandoah salamander or the spruce and fir forests? Our climate is changing, and we can neither reverse these changes nor raise the height of our mountains. According to Burkett, our spruce and fir forests are already declining, and lower elevation species are climbing higher into the mountains. "It's a pretty dynamic situation," says Burkett. "I suspect that Virginia in 2110 will look very different from Virginia in 2010."

Burkett believes smart management decisions can help some of these species weather the coming changes. If we cannot grow taller mountains, we can contribute to management and conservation programs that ensure our mountains are as healthy as possible. Thriving forests, clean rivers, and well-protected wild places: These may be the keys to survival for dozens of species. "Healthy populations and healthy habitats are going to have a better opportunity to adapt to these changing climatic conditions."

We probably cannot save the snowshoe hare in Virginia. But, just maybe, we can save the Shenandoah salamander—a species that is ours alone. □

Cristina Santiestevan writes about wildlife and the environment from her home in Virginia's Blue Ridge Mountains.



Yellow-bellied sapsucker

Rx *for* YOUR DOG

Three area veterinarians offer advice for taking in "man's best friend."

by Clarke C. Jones

Thousands of years ago, the first wild canine crossed over the divide of fear that separated it from man. The relationship that resulted when the dog first began sharing its space with humans and, in turn, allowed its subjugation to the human race has been a benefit to all mankind. Those domesticated dogs not only offered an early warning system for human encampments, but also acted as beasts of burden. An example, the ancient Basenji of Central Africa is thought to have assisted men in hunting game.

The evolution of the dog-human relationship is well documented. From the taming of ancient dogs, we now have over 150 breeds recognized by the American Kennel Club. Dogs have been bred selectively to improve the traits that fit particular needs of man. We have working dogs that herd sheep and cattle, dogs that provide security and rescue, and hunting dogs bred for specific tasks—whether it is pointing and retrieving game, or dogs that flush and chase game.

As man evolved from a hunter-gatherer to an agrarian and city dweller, dog breeds changed as well. Breeds became smaller or larger as man's desires or needs may have required.



Dr. McFadden checks out an appreciative patient as part of a wellness exam.

©Trisha Jones

It appears, however, that in instances where certain breeds have long been removed from a socialized pack, a form of pack mentality still remains. Some dogs seem happiest when they understand their place in a home environment, similar to experiencing a pack situation. Here, the human adults in the family may represent the Alpha male and female. It has also been noted that many dogs desire—and even require—a certain amount of attention. This may or may not correlate to a dog's behavior when it is reunited with the adult or other family members after being left alone for a period of time, such as during family errands.

Because humans have taken over what some consider the Alpha role of dogs—whether by design or by default—when we bring a puppy or dog into our home we ought to be aware of just what we are taking on.

I interviewed three veterinarians from the Richmond area: Dr. Owen C. McFadden, owner and hospital director of the Midlothian Animal Clinic; Dr. Steven R. Escobar, of the Springfield Veterinary Center in Richmond; and Dr. Thomas A. Carroll, who practices at the Village Veterinary Service in Amelia and the Nature Veterinary Center in South Hill. Sixty to seventy-five percent of their business is devoted to dog issues, and two of the three veterinarians are avid hunters. They are well qualified to answer the question I posed: "What do veterinarians think is important when bringing a canine into the home?"

As a veterinarian, what do you think new dog owners should know and understand when purchasing a family dog?

Dr. McFadden:

They should know and understand the responsibility they are undertaking. The responsibilities of ownership are just beginning when the dog is brought home. Besides the basics of providing food, water, and shelter, a dog will require preventive medical

care, including wellness examinations, vaccinations, heartworm and flea and tick prevention.

Dr. Escobar:

Prospective owners would serve themselves and their families well if they researched the breed of dog they want to bring home. Thought should be given to the age of any children in the household and the space available to the dog. The exercise needs of the particular breed are very important.

You can nip aggressiveness and dominance problems before they start by being a better educated pet owner. I see so many good dogs that have behavioral problems because the owner had not understood, or even cared about, what is involved in raising a pup. If more prospective owners would do a bit of homework by inquiring of their vets and breeders, there would be less dogs ending up in shelters.

Pet health insurance seems to be a hot topic lately. What is your opinion about obtaining medical insurance for your pet?

Dr. McFadden:

I think it is a wise investment. It is readily available and not as expensive as you might think. Your dog's good health will allow him to live longer; therefore, your pet's care will be an ongoing investment.

What are the most common problems people have with dogs and how can they prevent them?

Dr. Carroll:

Behavioral problems, such as housebreaking and chewing inappropriate things inside the house, are what most dog owners have to deal with. Knowing the idiosyncrasies of a particular breed could save the owner a great deal of problems. Some dogs may do well left alone for extended periods of time and some breeds can be very destructive when left alone, even for a very short time. Research

the breed to make sure there is a match with your lifestyle and living space and the particular dog you wish to own.

Housebreaking always seems to be an issue for dog owners. Any tips?

Dr. Carroll:

A dog owner should understand the proper correction techniques and the value of consistency when training a dog. The internet is a good source for helping the dog owner through this. Most dogs have a desire to fit into a unit, but the new dog owner must understand that it may take a couple of weeks for the dog to understand what is expected. The owner must be willing to put in the time. Be patient and be consistent. Consistency as to when you feed your dog, when you take it out for a walk, and when you correct it helps the dog learn what is expected much faster.

Are there different health issues between a large dog and a smaller dog?

Dr. Escobar:

While small dogs tend to live longer than larger dogs, small dogs seem to



Conditioning your dog before hunting season begins will help prevent injuries.

©Trisha Jones

have more cardiovascular and dental issues. If you want a mastiff or great dane, know from the start that your relationship with those types of dogs is historically shorter than with a dog like a chihuahua.

Dr. McFadden:

Golden retrievers as a breed tend to be allergy prone and susceptible to cancer. Small dogs such as pugs and bull dogs may have respiratory problems. Very active, deep-chested dogs can have a propensity for bloat.

What is bloat?

Dr. McFadden:

It is gastric dilatation and torsion (twist) of the stomach, and can be fatal if not treated quickly. Bloating often occurs when a dog is fed and then becomes very active after having minimal time to digest its food. It can also happen if you are out hunting and it's hot and you give your dog too much water, trying to cool him off, and then go right back to hunting again. A dog running with a gallon of water sloshing around its stomach could experience this condition.

In a hunting situation, how much water is enough to give your dog and feel it is safe to continue high activity?

Dr. McFadden:

A lot depends on the dog, but two cups of water may be enough. You certainly do not want your dog to become dehydrated, but use common sense. It is also important to give your dog a breather. Don't forget hypoglycemia; give him a snack as well. Dogs may look happy running and hunting, but if you and your dog have been lying around all summer and are not in shape, both of you could wind up with some type of injury.

How can people avoid injuries to their dogs if they own breeds that are very active?

Dr. Carroll:

If you are a hunter or run field or agility trials, one of the things you should do is to look at your dog as an athlete. If you have played any sport, you know the importance of conditioning and being in shape. If your hunting dog chases game, it is very important to make sure its pads are toughened before the start of hunting season. Foot injuries can put your dog out of commission for weeks and it isn't necessary. Hunt clubs could serve themselves well if they would invite a vet to review their kennel operation. It's a good way for a club to get first-hand information on how to improve and maintain the health of their dogs.

Dr. McFadden:

Owners can minimize a dog's susceptibility to injury or illness by maintaining their dogs in good physical shape through diet and exercise, annual examinations and vaccinations, as well as routine intestinal parasite de-worming, heartworm prevention, and flea and tick control. Injuries are often chance accidents, but use common sense. Don't put your dog in unnecessary, risky situations.

What are some of the advances you have seen in the last ten years in veterinary medicine?

Dr. Escobar:

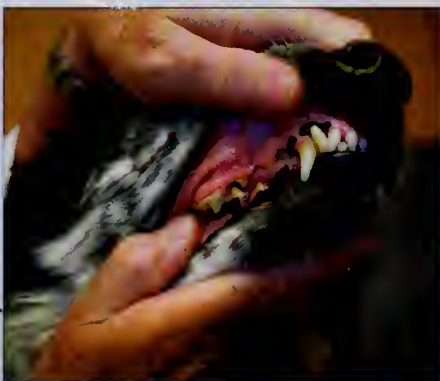
Ultrasound, MRI, and CT scans are used more today to help discover and locate diseases. The images from

these medical devices assist the vet to a much greater degree than the X-ray machines we had to rely upon years ago. We are able to find cancers, brain and spinal cord injuries, and other problems more quickly and with a greater degree of accuracy.

Besides skin diseases, what other problems are prevalent among dogs?

Dr. Escobar:

Obesity. Thirty years ago maybe thirty percent of dogs had an obesity problem. Now, seventy percent of dogs seem to have this problem. Ironically, I believe it has to do with the so-called "improved" quality of dog food we are feeding dogs. Thirty years ago there was one major brand of dry dog food that had fillers and fiber in it. A competitive dog food manufacturer presented a concept of a high-caloric dog food that would enable the dog owner to feed his/her dog less food volume. The theory was the dog owner could give the dog a better quality food, but because of the higher caloric content, the dog would need *less* of it, thereby saving the dog owner money. However, the dog still *seems* hungry and the owner, looking at the small amount of food in the dog bowl, believes he can't be helping the dog, so he begins to give the dog the same portion of food as he did before. If the dog is taking in higher calories and there is no increase in an exercise regimen, the dog may begin to put on weight.



Proper diet and care lead to healthy teeth.



Checking for mites and other ear conditions is part of a wellness visit.

How do you prepare a dog owner for the time when he or she may have to put their dog down?

Dr. Escobar:

First thing is—you do not judge the owner's decision. Some owners cannot let go and others are able to accept the reality that the dog's quality of life has deteriorated to the degree that it is in pain, and is suffering. You explain as best as you can what the dog has to live with each day, but in the end it is the client's decision.

Dr. Carroll:

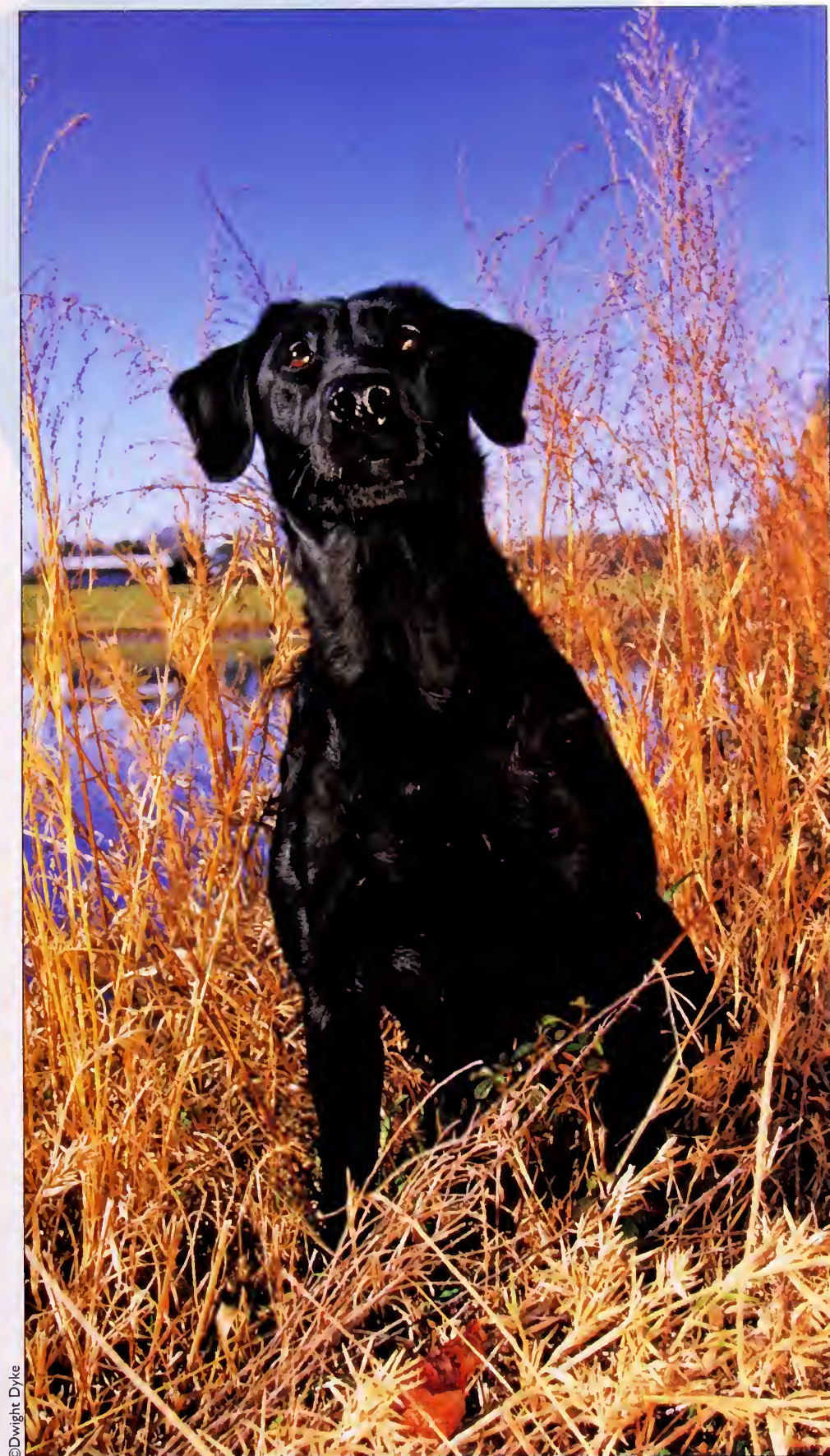
I never recommend euthanasia but I do explain to the client, as best as I can, what pain or discomfort the dog may be experiencing. I also explain what the prognosis is for the dog and treatment options and how effective or lasting these treatments may be. In the end, it is the owner who must make the decision.

Dr. Mc Fadden:

This is a really tough situation. It is not easy for the owner, and no matter how many times doctors have had to perform this procedure, it is not easy for *them*. A lot of veterinarians are dog owners, so most have a sense of what a dog owner is going through. In cases where you are dealing with an animal that has been a part of the family for 10 to 15 years, it can be emotionally grueling. Grief counseling is part of our training.

There is a common denominator found in each of the doctors interviewed—the compassion each has for the health of a dog. As one of the veterinarians put it, "Some people think they have a right to own a dog, and maybe they do—but their right does not end with ownership. With ownership comes *responsibility*." □

Clarke C. Jones is a freelance writer who spends his spare time with his black Lab, Luke, hunting up good stories. You can visit Clarke and Luke on their website at www.clarkecjones.com.



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2010-2011 Outdoor Calendar of Events

Unless otherwise noted, for current information and registration on workshops go to the "Upcoming Events" page on our website at www.HuntFishVA.com or call 804-367-7800.

November 13: Firearms deer season opens.

November 13-14: 15th annual *Call of the Wild* Conference. For more information: www.wildlifecenter.org.

December 11: Novice Youth Deer Hunt and Workshop, Occoquan Bay National Wildlife Refuge. For youth 12-18 with 3 years or less hunting experience.

December 14-January 5: Audubon Christmas Bird Count. For more information: <http://birds.audubon.org/bird/cbc/>.

January 28-30: Winter Wildlife Festival, Virginia Beach. For more information and registration: www.vbgov.com/winterwildlife.



You Can Make a Difference

HUNTERS FOR THE HUNGRY



Hunters for the Hungry receives donated deer from successful hunters and funds to cover the costs of processing, so that venison may be distributed to those in need across the state. Each \$40 contribution allows another deer to be accepted. Hunters donating an entire deer are not required to pay any part of the processing fee.

The David Horne Hunger Relief Bill gives hunters the opportunity to donate \$2 or more to the program when purchasing a hunting license. One hundred percent of each donation goes to providing venison to the hungry. For additional information or to make a donation, visit www.h4hungry.org or call 1-800-352-HUNT (4868). Each of us can make a difference.

QUAIL ACTION PLAN

Department staff are working with a broad range of public and private partners to restore critical upland habitat needed by the bobwhite quail to thrive. Among the many initiatives underway are:

- Establishment of early succession wildlife focus areas across the state, in concert with the work performed by Soil & Water Conservation Districts in Virginia;
- Wildlife professionals assisting with delivery of USDA Farm Bill programs to landowners that benefit quail and other, early succession wildlife species; and
- Establishment of demonstration areas that showcase technical management tools put in place to effectively manage for quail.

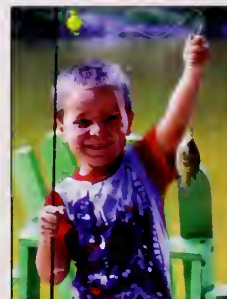
A new video, *Answering the Call, Virginia's Quail Recovery Initiative*, highlights the work being done by many state and federal agencies to restore quail habitat in Virginia. This video provides information on managing private lands for quail and encourages landowner participation in the quail recovery effort. Landowners interested in viewing the video can find it at www.dgif.virginia.gov. A limited number of DVDs will be produced. To request a video, or for more information about Virginia's Quail Action Plan, email DGIF biologist Marc Puckett.

For more information about the quail plan, go to: www.HuntFishVA.com/wildlife/quail/action-plan/quail-action-plan.pdf.

To contact a Private Lands Wildlife Biologist:
marc.puckett@dgif.virginia.gov.

Announcing the Kids 'n Fishing Photo Contest Winners!

Thanks to everyone who participated this year. Thanks also to our partners, Shakespeare and Green Top Sporting Goods, who awarded prizes to the top 3 winners in each age category. We could not do this without you. To view all the winning entries, go to: www.dgif.virginia.gov/kidsnfishing/2010-winners.asp.



Gavin, age 5



Kimberly, age 7



by Beth Hester

Gunnin' Birds: Featuring the Collection of Kroghie Andresen

Kroghie Andresen
2008 Spark Publications
Phone: 704-844-6080
www.gunninbirds.com
Hardcover w/ full-color photos
and maps
\$70.00

"I dedicate this book to my wife Ross... and to the legacies of the decoy carvers and waterfowl guides past and present, along the North Carolina Outer Banks and Back Bay Virginia area, and to the decoy collectors and historians who share my interest in Southern decoys."

—Kroghie Andresen

Retired Wachovia bank executive Kroghie Andresen has a passion for decoys, and over a thirty-year career as a collector, he has amassed a diversified collection of more than 1,100 wooden and canvas decoys including ducks, swans, brant, and various shorebirds from all along the Back Bay and North Carolina's Outer Banks regions.

Kroghie's wife Ross purchased his first decoy as a gift with which to decorate their new den. That lone decoy inspired him to seek out classic specimens of the decoy carver's craft, and more importantly, through extensive research, to attempt to document the stories of previously unknown carvers, the provenance of certain decoys, and the histories of the coastal communities where waterfowling traditions were woven into the fabric of everyday life.

This handsome, 380-page volume is appealing for a number of reasons: decoy aficionados will find

Kroghie's perspective on the world of decoy collecting instructive, and waterfowlers and coastal history lovers will relish the sections touching on the early years of waterfowling in these specialized environments. Especially engaging are the stories associated with the gun clubs and hunting adventures of yesteryear, decoy legend and lore, and the painstakingly detailed biographies of those artisans who breathed enough life into those cypress knees, juniper logs, and sheets of canvas to fool even the most wary duck.

Every decoy carver had a distinctive, regional style and Kroghie takes the reader on a guided decoy tour. Many decoy carvers were also farmers, hunting guides, boat builders, carpenters, and all-round watermen whose art was a natural extension of their lives in the outdoors. To weave together the various narratives, Kroghie interviewed local historians, other decoy collectors, and the carver's family members whenever possible. Each chapter contains compelling photographs of the craftsman and their environment, often in nostalgic sepia tone, or grainy black and white. Finally, detailed full-color photographs of the artist's decoys accompany each section.

Gunnin' Birds is an award-winning labor of love, a substantial document that preserves the history and traditions of an important coastal region's waterfowling art. You won't be able to put it down. Highly recommended. □



To learn more about *Find Game*, visit
www.HuntFishVA.com/hunting/findgame

Outdoor Kids



Ten-year-old Joshua Fischer took his first deer while hunting with his dad, Andy, on the opening day of the firearms season. The 11-pointer with a 16 1/2-inch inside spread weighed 147 pounds. Josh took his deer with a Browning .308 lever action that was left to him by his late grandfather, Edward J. Fischer Jr., who was an avid hunter and enjoyed the outdoors and teaching his three sons to do the same. Josh says there have been a lot of deer taken with this old rifle and no doubt there will be more.

Christmas BIRD COUNT



December 14–January 5

Get Involved!

www.audubon.org/bird/cbc/



Trust: a small word that means a lot in any relationship, whether it is between a dog and a human or a human and a human. Trust has been defined as a “firm reliance on the integrity or the ability of a person or thing.” For humans, trust is created by experience and by good communication.

In my case, I have the added advantage of instinct. Instinctively, I put great trust in my nose.

My nose tells me that there is a pheasant close by or on the move. The more experience I have in situations where I get to smell pheasants and follow their scent, the more I trust my instincts as to where the specific pheasant is and the better chance I have of flushing that bird. The more times my nose and I are right, the more I communicate to my hunting partner that I, and not he, know where that wily rooster will be.

By watching how your hunting dog reacts or communicates to you the possibility of game scent, the more you—the hunter—will be prepared. Your dog communicates with you all the time when you are in the field. It is *up to you* to learn what your dog is telling you, either by watching its actions closely or by carefully listening to it. A pointing or flushing dog may exhibit a very special motion or action that, if watched carefully, will let you know that he is locked on to a bird or covey. The pitch or the volume of a trailing hound’s cry, for example, lets the experienced hunter know that the dog has either found the scent or is close to the quarry.

Dogs obviously do not have the same writing or verbal skills as humans, but we are great at *observing* things. We pick up the nuances of facial expressions, body language, and tone of voice. We can tell if you are in a good mood or if you’ve had a bad day at the office.

I see that as a plus. For instance, if we go to a foreign country and meet a foreign dog, we can still understand what that dog is telling us just by its posture. If a dog’s tail is moving in a certain way, if a dog is standing stiff-legged, if a dog’s ears are set in a certain way or its gums begin to curl, we dogs know what is being said to us. You humans, on the other hand, will repeat what you said in your own language either slower or louder to a foreign person (who still does not understand what you said the first time), thinking that speaking slower and louder makes things clearer. It does not!

Oftentimes, you humans may say the words but you do not mean what you say. For instance, the other day the Alpha male in our house told the Alpha female in our house that he was going fishing for the weekend with some of his friends. The Alpha female said, “Go ahead and do what you want to do.” When the Alpha male returned from his fishing weekend feeling rested and happy, he soon learned that “Go ahead and do what you want to do” does not mean what he thought it did. Now a dog would not have that problem. A bark can mean, *I am happy to see you*, or it can mean, *Stay away!* Dogs tend to watch

and observe what the rest of another dog’s body is saying before we make our decisions. By observing how things work in the pack, we establish an order of some form that limits confusion and arguments. Dogs understand the value of order and teamwork, and we tend to work things out fairly. All of this is done without that something you humans evidently cannot do without—**LAWYERS.** □

Keep a leg up,
Luke

Luke is a black Labrador retriever who spends his spare time hunting up good stories with his best friend, Clarke C. Jones. You can contact Luke and Clarke at www.clarkecjones.com.

Don't Forget! Mandatory Duck Stamps & HIP



All hunters who plan to hunt doves, waterfowl, rails, woodcock, snipe, coots, gallinules, or moorhens in Virginia must be registered with the Virginia Harvest Information Program (HIP). HIP is required each year and a new registration number is needed for the 2010-2011 hunting season. To obtain a new HIP number, register online at www.VAHIP.com or call 1-888-788-9772.

In addition, to hunt waterfowl in Virginia hunters must obtain a Federal Duck Stamp and the Virginia Migratory Waterfowl Conservation Stamp. The annual Migratory Waterfowl Conservation Stamp can be purchased for \$10.00 (resident or non-resident) from VDGI license agents or from the Department’s website. To request collector stamps and prints, contact Mike Hinton by email at ducks@hintons.org.

Photo Tips

by Lynda Richardson

Gray Snow a Problem? – Just Open Up!

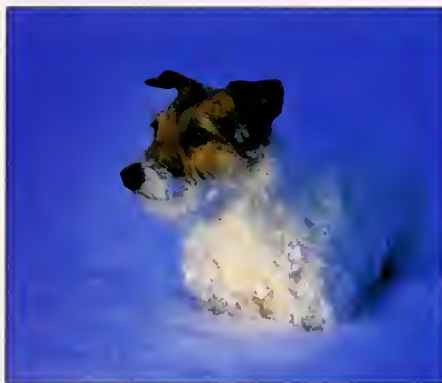
One of the reasons some photographers have trouble capturing white snow is due to the fact that all internal camera meters are calibrated to make everything 18 percent gray! It doesn't matter which in-camera metering system you use, the meter's mission is to hit that percentage. (And by the way, 18% gray is approximately the tone of mature green grass.)

With this in mind, if your subject is black the meter will suggest a setting to make the subject 18% gray—not black. If the subject is white it will also suggest a setting to make that subject 18% gray—not white. As long as you are aware of this, it isn't a problem and you can make the proper exposure adjustments. If you're not aware of it you will end up with 18% gray subjects all the time!

So, how do you fix this gray snow problem? Simple...just add more light. By opening up or adding one to two stops of light, you can change gray snow to white snow. Easy, eh?

Here's an example of what I'm talking about. If you decide to shoot a bright snowy scene at ISO 100 and you want a lot of depth-of-field and select f22.0, your camera's meter will probably suggest around 1/60th as your shutter speed. Go ahead and shoot this exposure for comparison, but it will result in gray snow.

Now, to get white snow you add light by doing one of the following: 1) raise (open up) the ISO to 200, and this will add one stop of more light; or 2) lower (open up) the shutter speed from 1/60th to 1/30th, and this will add one stop of light; or 3) lower (open up) the aperture setting from f22.0 to f16.0, and this will add one stop of light. (ALERT, ALERT:



Sometimes snow doesn't record white even if you open up. In this photograph of my dog, Miss Max, which was originally shot on Fuji Provia slide film, the dog showed up white (because I opened up!) but the snow recorded a rich blue. Canon T90 SLR film camera, settings not recorded.
© Lynda Richardson

DO NOT change more than one setting at a time when testing this out!)

If you discover that your snow is still grayer than you'd like, feel free to

open up one of your settings even more. Maybe change the ISO to 400, the aperture to f11.0, or the shutter speed to 1/15th. So, is your snow white yet? It should be now.

Having a better understanding of how your camera meter works and how to make proper exposures is one of the best ways to improve your photography. Good Luck and Happy Shooting! □

You are invited to submit one to five of your best photographs to "Image of the Month," Virginia Wildlife Magazine, P.O. Box 11104, 4010 West Broad Street, Richmond, VA 23230-1104. Send original slides, super high-quality prints, or high-res jpeg, tiff, or raw files on a disk and include a self-addressed, stamped envelope or other shipping method for return. Also, please include any pertinent information regarding how and where you captured the image and what camera and settings you used, along with your phone number. We look forward to seeing and sharing your work with our readers.

Image of the Month



Congratulations go to Mariah Lambie of Richmond for her wonderful snowy image of a Carolina wren. At age 13, Mariah loves photographing wildlife and can be seen stalking birds all around her neighborhood. Panasonic DMC-FS15 digital camera, ISO 100, 1/80th, f5.9, with flash. Way to go Mariah!!!



by Ken and Maria Perrotte

Dining In

Chicken Fried Venison, the Ultimate Comfort Food

Not too long after joining the military, Ken found himself in a little Texas café where the waitress recommended the chicken fried steak, sometimes known as country fried steak. That approximately 10-inch-diameter slice of tenderized cube steak arrived sizzling hot, coated in a golden brown crust and topped with perfectly seasoned cream gravy. Thick mashed potatoes with vegetables shared the plate. Thus began a love affair that has endured for decades.

It is so difficult to serve a modest helping of chicken fried anything. Some meals demand full bellies at the end and a suitable challenge, such as watching a football game while a fire warms the room, or a similarly strenuous activity.

Naturally, the question eventually arose, "How would this taste with deer?"

The answer, "Pass me some more of that gravy, please."

Ingredients (serves 2-4)

- 1 pound boneless venison cut into ½-inch slices (we like to use round roast and butterfly the smaller pieces)
- ¼ cup milk
- 1 egg or ¼ teaspoon egg substitute
- ¼ to ½ teaspoon salt, depending on your taste
- ¼ teaspoon pepper
- ⅓ to ½ cup all-purpose flour
- 3 tablespoons butter
- 3 tablespoons canola or vegetable oil

Gravy

- 1½ cup whole milk
- 2 rounded tablespoons flour
- Salt and pepper to taste

Preparation

Several years ago, we discovered the Mr. Tenderizer, a simple, inexpensive gadget that makes it easy to

tenderize meat. It assembles quickly, works well, and is easy to clean. It is made of plastic and not designed for heavy, prolonged work, but in those few times a year when a recipe calls for pounding or tenderizing thin cuts of meat or poultry, we've enjoyed the quality of its results. Of course, other commercial products are available or there is the meat mallet option.

Run the venison pieces through the tenderizer or pound with a meat mallet until it's uniformly about ¼-inch thick. It may take a few trips through to reach desired thickness. Mix the egg and milk and soak meat in the mixture while combining the flour, salt, and pepper on a paper plate or cutting board. Lift meat pieces from the egg mixture and let excess drip off. Dredge in flour, coating well. Melt butter or oil in a large skillet over medium heat. Add the meat and brown on both sides. Remove the meat and keep warm while making the gravy.

Blend the gravy ingredients well and add to pan drippings. Stir or whisk over medium heat until thickened. Spoon gravy over meat and potatoes, if desired, when serving.

Sides

Garlic Mashed Potatoes

- 1 pound Yukon Gold Potatoes, cut into 1½- to 2-inch chunks
- 3 tablespoons softened margarine
- ½ teaspoon finely chopped garlic
- 2 tablespoons mayonnaise
- Salt and cracked black pepper, to taste
- 2 or 3 tablespoons milk

Boil potatoes in water until tender, about 15 minutes. While cooking, combine margarine and garlic. Drain and mash potatoes in a mixing bowl. Mix in the margarine and garlic, mayonnaise, salt and pepper. Add milk to desired consistency.

Serve with green peas and biscuits. □

VIRGINIA WILDLIFE OUTDOOR CATALOG

2010 Limited Edition Virginia Wildlife Collector's Knife

Our 2010 Collector's Knife has been customized by Buck Knives and features a bobwhite quail in flight. The elegant, solid cherry box features a field scene. Knives and boxes, made in USA.

Item # VW-410 \$90.00 (plus \$7.25 S&H)



Sally Mills

Virginia Wildlife DVD

"A Professional Guide to Field Dressing, Skinning and Butchering White-Tailed Deer" gives you step-by-step instructions on how to field dress a deer. By the end of the video you will learn how to make butterfly chops, de-bone a front shoulder, tie up a roast using a butcher's knot, be able to identify all the proper cuts of meat on a deer, and more!

Item # VW250 \$12.00 Includes S&H



2009 Limited Edition Virginia Wildlife Collector's Knife

Our 2009 Collector's Knife (customized by Buck Knives) features a wild turkey in full strut. The elegant, solid cherry box features a forest scene. Knives and boxes, made in USA.

Item # VW-409

\$85.00 (plus \$7.25 S&H)

NEW

Canvas Tote Bag

Show your support for the Virginia Birding and Wildlife Trail with this reinforced cotton canvas blue and tan bag. Measures 14 x 5 x 13" and includes FREE SHIPPING to thank you for your support.

Item # VW135 Price \$12.95



NEW Birder's Journal

Become a budding naturalist by recording your bird sightings and outdoor observations in this handsome leather-bound journal. Includes a complete list of Virginia birds at the front; measures 10 1/2 x 7". FREE SHIPPING to thank you for your support.

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P.O. Box 11104
Richmond, VA 23230-1104

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tion. All orders must mention code # U10C4 and be pre-paid by check, payable to *Treasurer of Virginia*. Mail to Virginia Wildlife Magazine, P.O. Box 11104, Richmond, VA 23230-1104. Please allow 6-8 weeks for delivery.

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